

encoding a modified amino acid sequence having at least one deletion, addition, substitution or alteration, said polynucleotide variant being capable of accelerating the biosynthesis of ML-236B; and

B<sup>1</sup> (b) a polynucleotide encoding a protein having the amino acid sequence of SEQ ID NO 42, or a polynucleotide variant thereof encoding a modified amino acid having at least one deletion, substitution or alteration, said polynucleotide variant being capable of accelerating the biosynthesis of ML-236B.

2. (Amended) A polynucleotide according to claim 1 comprising a mutant or variant of SEQ ID NO 37 capable of accelerating the biosynthesis of ML-236B.

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B<sup>9</sup> 4. (Amended) A polynucleotide according to claim 1 comprising DNA obtained from transformed *Escherichia coli* pSAKexpE SANK 72499 (FERM BP-7005).

5. (Amended) A polynucleotide according to claim 1 comprising a variant of SEQ ID NO 41 capable of accelerating the biosynthesis of ML-236B.

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7. (Amended) A polynucleotide according to claim 1 comprising DNA obtained from transformed *Escherichia coli* pSAKexpR SANK 72599 (FERM BP-7006).

8. (Amended) A polynucleotide according to claim 1 in combination with one or more other polynucleotides, said combination being capable of enhancing the production of ML-236B in a ML-236B producing micro-organism.

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9. (Amended) A polynucleotide according to claim 3 in combination with one or more other polynucleotides, said combination being capable of enhancing the production of ML-236B in a ML-236B producing micro-organism.

10. (Amended) A polynucleotide according to claim 4 in combination with one or more other polynucleotides, said combination being capable of enhancing the production of ML-236B in a ML-236B producing micro-organism.

11. (Amended) A polynucleotide according to claim 6 in combination with one or more other polynucleotides, said

combination being capable of enhancing the production of ML-236B in a ML-236B producing micro-organism.

12. (Amended) A polynucleotide according to claim 7 in combination with one or more other polynucleotides, said combination being capable of enhancing the production of ML-236B in a ML-236B producing micro-organism.

13. (Amended) A polynucleotide according to claim 8 comprising a polynucleotide of SEQ ID NO 37, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

14. (Amended) A polynucleotide according to claim 9 comprising a polynucleotide of SEQ ID NO 37, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

15. (Amended) A polynucleotide according to claim 10 comprising a polynucleotide of SEQ ID NO 37, or a variant thereof, in combination with one or more sequences selected from

the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

**16. (Amended)** A polynucleotide according to claim 11 comprising a polynucleotide of SEQ ID NO 37, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

b2 **17. (Amended)** A polynucleotide according to claim 12 comprising a polynucleotide of SEQ ID NO 37, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

**18. (Amended)** A polynucleotide according to claim 8 comprising a polynucleotide of SEQ ID NO 41, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

19. (Amended) A polynucleotide according to claim 9 comprising a polynucleotide of SEQ ID NO 41, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

62 20. (Amended) A polynucleotide according to claim 10 comprising a polynucleotide of SEQ ID NO 41, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

21. (Amended) A polynucleotide according to claim 11 comprising a polynucleotide of SEQ ID NO 41, or a variant thereof, in combination with one or more sequences selected from the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

22. (Amended) A polynucleotide according to claim 12 comprising a polynucleotide of SEQ ID NO 41, or a variant thereof, in combination with one or more sequences selected from

the group consisting of SEQ ID NO 37, SEQ ID NO 41, SEQ ID NO 43, SEQ ID NO 45, SEQ ID NO 47, SEQ ID NO 49 and variants thereof.

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B3 24. (Amended) A polynucleotide according to claim 23 capable of accelerating the biosynthesis of ML-236B in a ML-236B producing micro-organism when introduced in the ML-236B producing micro-organism.

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B4 27. (Amended) A vector according to claim 26 obtained from *Escherichia coli* pSAKexpE SANK 72499 (FERM BP-7005) or *Escherichia coli* pSAKexpR SANK 72599 (FERM BP-7006).

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30. (Amended) A host cell according to claim 29, wherein the host cell is a ML-236B producing micro-organism.

B5 31. (Amended) A host cell according to claim 30, wherein the host cell is *Penicilium citrinum*.

32. (Amended) A host cell according to claim 29, wherein the host cell is *Escherichia coli*.

33. (Amended) A host cell according to claim 32, wherein the host cell is *Escherichia coli* pSAKexpE SANK 72499 (FERM BP-7005).

34. (Amended) A host cell according to claim 32, wherein the host cell is *Escherichia coli* pSAKexpR SANK 72599 (FERM BP-7006).

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43. (Twice Amended) A method according to claim 40, wherein the producing of ML-236B occurs in the absence of recombinant mlcA corresponding to SEQ ID NO 44, recombinant mlcB corresponding to SEQ ID NO 46, recombinant mlcC corresponding to SEQ ID NO 48 or recombinant mlcD corresponding to SEQ ID NO 50.

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47. (Amended) A polynucleotide encoding a protein having the amino acid sequence selected from the group consisting of SEQ ID NO 44, SEQ ID NO 46, SEQ ID NO 48 and SEQ ID NO 50, or a variant polynucleotide encoding a modification of said amino acid sequence having a deletion, substitution, addition or alteration, said variant polynucleotide being capable of accelerating the biosynthesis of ML-236B.

48. (Amended) A polynucleotide according to claim 47  
selected from the group consisting of SEQ ID NO 43, SEQ ID NO 45,  
SEQ ID NO 47 and SEQ ID NO 49.

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Please add the following claims:

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--54. (New) A polynucleotide according to claim 1, wherein  
the polynucleotide encodes a protein having the amino acid  
sequence of SEQ ID NO. 38.

55. (New) A polynucleotide according to claim 1, wherein the  
polynucleotide encodes a protein having the amino acid sequence  
of SEQ ID NO 42.--

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